

Typologies of Collaboration based on Motivation and Structure

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Abstract

The purpose of this paper is to set up a collaboration typology framework and try to reveal interrelationships between different types of collaboration motivations and structure. In this paper, drawing on multi-theories, collaboration motivations are clustered as resource-oriented, strategy-oriented and legitimacy-oriented, while collaboration structure is sorted as informal agreement, legal entities and contract-based. Propositions considering relationships between these two dimensions are also worked out, where they are confirmed to fit well with the cases of actual collaboration activities. Therefore, with the well-defined collaboration typology models, this paper could be used for the clarifying and distinguishing on the different forms of collaborations. Moreover, with the validated propositions, this work also helps to answer 'which collaboration structure would be preferred when considering certain motivation for the establishment of collaboration'. Thus, the general work here provides a sound theoretical basis for the strategic decision support on the collaboration activities.

Keywords

Collaboration; Typology; Motivation; Collaboration Form; Interrelationships

Introduction

Participating in collaborations is one of the increasing popular strategies for organizations to get access to complementary resources, to share risk and cost, and to promote for better opportunities. And when it comes to collaboration, different terminology could be found as in theoretical and practical studies. They are joint venture, R&D consortia, strategic cooperative agreement, license contract, and so on. All these forms are in the scope of collaboration, yet with different kinds of collaboration motivations and structure. Based on Chen et al. (2014), collaboration is an arrangement attended by a number of autonomous organizations with the common target. They share resources and risk, as well as joint-undertake activities for mutual benefit, while keeping their own identity during their collaboration interactions. Types of collaboration vary according to different characteristics. Here collaboration motivation and structure are considered as two of the logic determinants for the configuration of collaborations (Barnes, Raynor and Bacchus, 2012). Nevertheless, some questions arise such as 'which kinds of motivations are there within organizations' collaboration', and 'which collaboration structure should be taken into account when considering certain collaboration motivations'. To deal with these issues, derivative question which should also be clear is: 'what are the relationships between collaboration motivation and structure'. For better understanding, method such as typology analysis is suggested for the distinguishing on the different characteristics of collaborations (Baum, 2008). Taken together, in this work, a typology framework of collaborations would be set up. Moreover, extended work would also be sought on their inter-relationships.

Typology of Collaboration

A typology is a systematic classification of types that has characteristics or traits in common. It is based on the definition of characteristics, where members of each type are identified by postulating their special attributes according to these characteristics (Afsarmanesh, Camarinha-Matos, 2007). When it comes to collaboration, and considering the roles of motivation and collaboration structure for the configuration of collaboration, typology would be proposed according to these two dimensions.

Typology Based on Motivations

In practice, motivations of the collaborative networks are impacted by the motives of its members, especially of its

focal organizations (Dacin, Oliver and Roy, 2007). Organizations' motivation to form an alliance derives from analysis on the situations inside and outside. It is not a responsive action, but a strategic intent. Based on the internal scrutiny and environment scanning with SWOT analysis (Todeva and Knoke, 2005), strategy intentions of organizations are classified as resource-oriented, strategy-oriented and legitimacy-oriented. Here resource-oriented is based on the strength and weakness analysis in the internal characteristics of organizations, while strategy-oriented and legitimacy-oriented are based on the opportunity and threat analysis on the external characteristics within the market and societal environment respectively. In detail, general types of collaboration have been clustered according to motivation as shown in table 1.

TABLE 2 TYPOLOGY BASED ON COLLABORATION MOTIVATIONS

Motivation	Resource-oriented	Strategy-oriented	Legitimacy-oriented
Theory	Transaction cost-, resource-based view	Market relationship theory	Institution-societal theory
Motivations in actual networks	Get access to special resources; Sharing of cost and risk; Pooling of resources for scale effects; Pooling of resources for the exploit of new or improvement of the existed; Extent the usage of resources; Intangible resources for learning.	Continuous collaborations ; Strategy relationship for the searching of opportunities; Potential ties with other partners; Promotion for better opportunity; Enhance market image.	Overcoming legal barriers; Seek for industry norms for competitive advantages (bandwagon effect); Smooth with the community constituent.

Typology Based on Collaboration Form

Considering works of Baum (2008) and with the integrating of the studies on the collaboration power and interdependence (Tangpong, et al., 2008), general collaboration structure has been clustered as in three-part types: informal agreement, legal entity-based and contract-based (see table 2). Whereas legal entity-based structure includes legal entity with the setup of corporation and association respectively, contract-based structure refers to bilateral contract-based and unilateral contract-based. Each of these collaboration structures embodies different features when considering characteristics related to the 'investment and cost sharing' and 'interdependence level'.

TABLE 2 TYPOLOGY BASED ON COLLABORATION STRUCTURE

Characteristics	Features				
Finance sharing	Common			Separate	
Interdependence level	Low level	Mutual dependent		Mutual dependent	A depends on B
Legal form	Informal Agreement	Legal entity-based		Contract-based	
		...with the setup of corporation	...with the setup of association	Bilateral contract	Unilateral contract
Actual types of legal forms	Gentlemen's agreement	Joint venture	Enterprise association	R&D collaboration contract	License contract; Distribution agreement
Collaboration Types	Opportunity society	Joint venture	Industry standard groups	R&D consortia; cartels	Franchising; License contract; Subcontractor networks

Relationships between Types of Collaboration Motivation and Structure

1) Resource-Oriented and Its Collaboration Structure

Considering resource-based theory, the principle for the configuration of a resource-based collaboration is to find a structure which could balance the issues between 'being able to procure valuable resources from another party' and 'without losing control of one's resources' (Das and Teng, 2000). Thus, before the setup of a collaboration, activities should be defined in the contract, so as to achieve the highest value while safeguard the rights of collaboration members. Here contract-based is much more suggested when the collaboration motivation is primary resource-based. Moreover, considering the dependence degree between collaboration members, bilateral contract-based is a better choice for the mutual dependent ones, while unilateral contract-based is preferred for the situation when one organization depends on the other. For instance, within an R&D

consortia where members work together for the joint value or benefits, bilateral contract-based would be much more used. One successful example could be the collaboration between Rover and Honda. HP and Cisco System is another case of resource-oriented motivation for bilateral contract-based structure. For the case that one party relies on the other and there is relative less engagement of the members, e.g. Franchising or license contract, unilateral contract-based would be more suitable. One of the most classic examples would be the Subway or McDonald's. Taken together, it concludes: *when the motivation is primary resource-based, a contract-based structure is preferred for the prospective collaboration. Moreover, when organizations are mutual dependent, bilateral contract-based are more suggested, while unilateral contract-based is more for the condition that one organization depends on the other.*

2) Strategy-Oriented and Its Collaboration Structure

Considering social relationship theory, the principle for the configuration of a strategy-based collaboration is to get a structure which enables to prevent and control opportunistic behaviors, so as to keep collaboration in a lasting manner. When organizations collaborate only for the keep of strategic relationships and searching for the opportunities, gentlemen's agreement is a good choice for the consideration. In this case, trust plays a great role for the control of opportunisms. When organizations are mutual dependent and aim to collaborate on a special issue for an extended period, however, if both trust and contract-based collaboration are not sufficient for the safeguards against opportunistic behavior, founding of a legal entity would be considered as for a better guarantee of enduring compliance (Zutshi and Tan, 2009). Such collaboration forms could be enterprise association for common benefit, e.g. Star Alliance. Joint venture is another main form of legal entity-based collaboration. This equity based collaboration is very popular in today's business environment and one of the most famous examples could be found as the establishment of Airbus. Taken together, it concludes: *when the primary motivation is to keep for a strategic relationship for the searching of opportunities, informal agreement would be preferred. Moreover, when organizations are mutual dependent and aim to collaborate for the long-term, legal entity-based alliance would be a good choice.*

3) Legitimacy-Oriented and Its Collaboration Structure

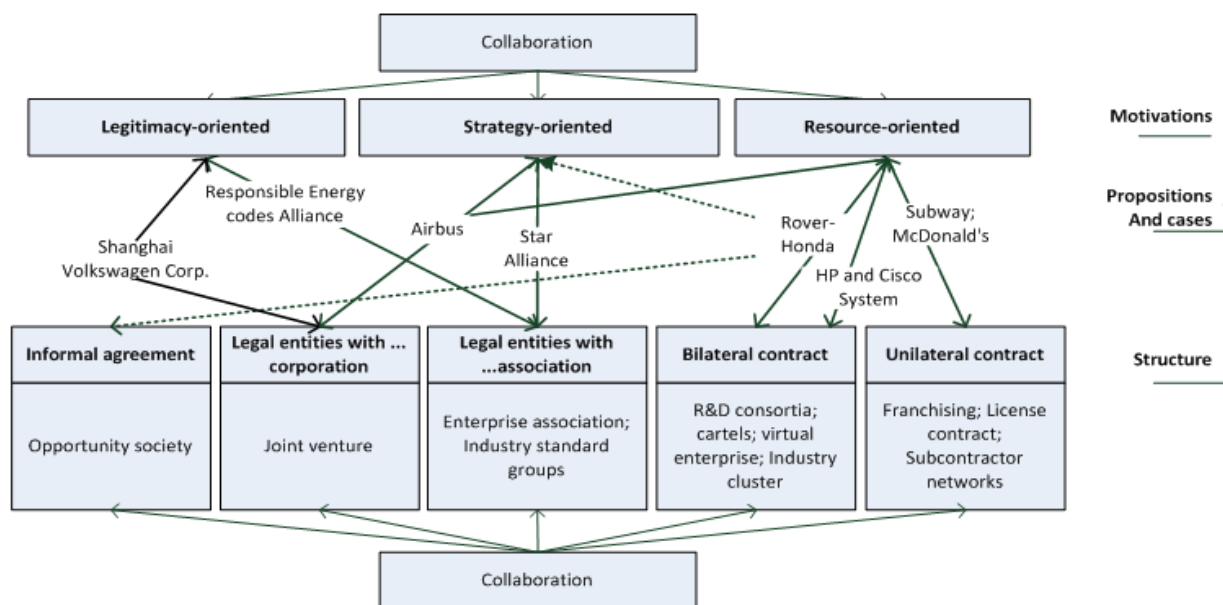


FIG. 1: VALIDATION CASES FOR THE INTER-RELATIONSHIPS

Drawing on institutional theory, collaborations serve an important legitimating function for organizations. Thus, the principle for configuration of a legitimacy-oriented collaboration is to keep an efficient legitimacy guarantee on the collaborative activities. Here informal agreements would be less attractive in such cases, because they do not offer sufficient legitimacy guarantee; while contract-based will also not be preferred for two reasons. First, when organizations attempt to collaborate overcome legal barriers, e.g. to get rights and qualifications to

conduct business in a foreign market, joint venture would be suggested. One representative example is the joint venture which has been established by Volkswagen from Germany and Shanghai Automotive Industry Corporation in China. Another example is the setup of the 'National Polystyrene Recycling Corporation' for the preempting of regulatory pressure from the U. S. environmental Protection Agency (Lin and Darnall, 2014). Second, when organizations attempt to seek 'more stringent regulatory codes or standards for the entire industry', enterprise association or industry standard groups would be a good choice. Examples could also be found from the development of Responsible Energy Codes Alliance (Lin and Darnall, 2014). Taken together, this work concludes: *when the primary motivation is to get the legitimacy guarantee for their collaboration activities, the establishment of legal entities would be a good choice. Moreover, when organizations hold with detail opportunities or innovative ideas, joint venture is preferred. When organizations are more inclined to get a bandwagon effect, enterprise association or industry standard groups would be more suggested.* Taken together, inter-relationships and validation cases have been listed as in Fig.1.

Conclusion

In this paper, motivation and collaboration organization has been considered, as these two dimensions are the basic logics for the establishment of collaboration. Typologies of collaboration have also been conducted on this two items, so as to provide an in-depth look into this special issue and shed some light on the theory of collaboration management. As the study here mainly focuses on the initial stage of collaboration, collaboration form has been highlighted for the analysis. However, with a view to the general collaboration process, organization structure including task specialization, management structure and institutionalization would further be considered for the evolution of collaboration.

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